DOCUMENT RESUME

ED 193 948 FL 011 926

AUTHOR	Nieves-Squires, Sarah; Goodrich, Robert L.
TITLE	Working Definitions of Terms for the Bilingual Instructional Features Study. Planning Paper 1. Bilingual Instructional Features Planning Study.
INSTITUTION	Abt Associates, Inc., Cambridge, Mass.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C. National Council on Educational Research.
REPORT NO	AAI-80-7
PUB DATE	1 Jan 80
CONTRACT	400-79-0071
NOTE	48p.; For related documents, see FL 011 927-930.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Bilingual Education; *Definitions; *Educational Planning; Educational Research; Elementary Secondary Education; *Instructional Development; Vocabulary
IDENTIFIERS	National Institute of Education

ABSTRACT

This report is one of five submitted as products of a "Study Designed to Assist Planning of Research on Significant Instructional Features in Bilingual Education Programs." The reports are intended to assist the National Institute of Education (NIE) in its plans for a major new research study in bilingual education. The present volume is a discussion of working definitions of terms for use in the features study. The terms discussed are "bilingual education," "consequences for children," "instructional features," "significant," and "model." Alternative definitions and the implications of each for design are presented. The definitions selected by NIE are intended to guide the research to be conducted. (Author/JB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED193948

ABT ASSOCIATES INC.
55 WHEELER STREET, CAMBRIDGE, MASSACHUSETTS 02138
TELEPHONE • AREA 617-492-7100

BILINGUAL INSTRUCTIONAL FEATURES PLANNING STUDY

AAI Report #80-7

Planning Paper 1

Working Definitions of Terms for the Bilingual Instructional Features Study

by

Sarah Nieves-Squires
Robert L. Goodrich

January 1, 1980

Contract No. NIE-400-79-0071
Study Designed To Assist Planning of Research on Significant Instructional Features in Bilingual Education Programs: Task 1 Report

Robert L. Goodrich, Project Director
Sarah Nieves-Squires, Deputy Project Director

Mae Chu-Chang, Project Officer

Prepared for:
The National Institute of Education
1200 19th St. N.W.
Washington, D.C. 20208

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

FL011926

Contract Manager	Quality Control Reviewer	Management Reviewer

SEP 2 1980

FOREWORD

This report is one of five submitted by Abt Associates Incorporated (AAI) to the National Institute of Education, as products of a "Study Designed to Assist Planning of Research on Significant Instructional Features in Bilingual Education Programs", Contract No. NIE-400-79-0071. The reports are intended to assist NIE in its plans for a major new research study in bilingual education. The information provided will be combined with that from other sources by NIE in its construction of a research plan, to be incorporated in one or more requests for proposals (RFP's) to implement and conduct the major study.

The Instructional Features Study was formulated by the Division of Education Part C Coordinating Committee as one of several studies that implement research mandates in the language of ESEA Title VII, Part C. A description of the study (denoted "B-1") is provided in the U.S.H.E.W. Research Plan for Bilingual Education (July, 1979). This planning assistance study was one component of Phase I of the Three phase HEW plan.

These reports were prepared as products of Tasks 1-5 of the planning assistance contract. The titles of the reports, and summaries of their contents, are:

1. Working Definitions of Terms for the Bilingual Instructional Features Study, by Sarah Nieves-Squires and Robert L. Goodrich.

   This is a discussion of working definitions of terms for use in the features study. The terms discussed are "bilingual education", "consequences for children", "instructional features", "significant", and "model". Alternative definitions and the implications of each for design are presented. The definitions selected by NIE are intended to guide the research to be conducted.

2. A Bibliography of Significant Instructional Features in Bilingual Education Programs, by Sarah Nieves-Squires, et al.

   This is an annotated bibliography of papers, articles, pamphlets and books that deal with instructional features of bilingual education. The materials are organized by a classification system of features based on a content analysis of the sources surveyed. The report demonstrates that, while many instructional features are discussed, there is little or no empirically based research on their specific consequences for children.

3. Planning Factors for Studies of Bilingual Instructional Features, by Robert L. Goodrich.

   This report is based on a review of studies of educational instructional features in both monolingual and bilingual contexts, and on conversations with a large number of researchers and critics. The intent of the report is to summarize the state of the art of bilingual educational features research as a base for designs to be developed by NIE.

4. Tentative Alternative Designs for a Study of Significant Instructional Features in Bilingual Education, by Robert L. Goodrich.

   This report presents alternative study designs and plans for implementation of the instructional features study. It is based on the knowledge base assembled in the three preceding reports. The designs presented are not to be implemented directly by NIE in the RFP, but used. Rather, they are simply one source of information available to the NIE planners, to be factored into the overall design process.

5. Feasibility and Credibility of Bilingual Instructional Features Study Plans: Field Verification, by Sarah Nieves-Squires, Robert L. Goodrich, and Cristina Bodinger-de Uriarte.

   This report summarizes the results of 123 open interviews conducted with bilingual practitioners and administrators in five sites: Los Angeles, Miami, New York, Oakland, Rough Rock, AZ. The questions asked were designed to elicit responses about the working definitions of terms (Paper 1) and the designs considered (Papers 3, 4). The intent was to test the credibility and acceptability to consumers of alternative study approaches.

1. Introduction

This report is the first of a series to be prepared for the National Institute of Education (NIE) to assist the Institute in planning a study (or studies) of Instructional Features in Bilingual Education, as authorized by Congress in the Bilingual Education Act, Part C. The overall goal of this planning study is to produce alternative designs and recommendations for the Instructional Features Study. NIE will integrate these plans and recommendations into its own planning process, and, when this process is complete, they will issue RFP's for the implementation of the study.

This particular planning report is one of three to be submitted simultaneously to NIE. The goal of the three reports is to establish a base for formulation of study plans, by bringing together existing knowledge about bilingual education features in a coherent and useful form. The topics of the three are (1) working definitions of terms in bilingual education, (2) published knowledge about instructional features in bilingual education, and (3) planning factors for new studies, based on strengths and weaknesses of previous studies.

The terms for which fuller working definitions are to be developed in this report are "bilingual education," consequences for children," "instructional features," "significant," and "model." Each of the remaining sections of this report presents one of these terms. Each section consists of a background article to explain the historiographic, sociological, and educational basis for definitions to be provided and a second article that sets forth the definitions; and a third section that presents implications for design of the instructional dimensions study. In each case, two or three alternative definitions are provided. Since these definitions will be operationalized and used directly in the planning of new studies, these alternatives reflect different directions in which the actual research could turn. NIE will select the actual working definitions to be used.

The definitions to be presented are based on several forms of knowledge and inquiry. First, we discussed alternative definitions with our consultants and with a large number of researchers in an extended field trip. Next, we applied our knowledge of study design and instrumentation to consider the problem of operationalizing the definitions. Then the alternative definitions themselves were constructed.

The definitions presented here will be incorporated in interview protocols to be used in a field verification effort. These will be administered in February 1980 to teachers, aides, school administrators, parents, and community people in several sites. These will include Cuban, Puerto Rican, Chicano, Navajo, and Chinese Communities. The protocols will be integrated and brought directly to bear on a revised version of this report. Additional input from our consultants and other researchers will also be sought and used, to reflect the current thinking of a diverse group of persons who have stakes in bilingual education. A report on the field verification effort will be submitted to NIE on March 1, 1980.

2. Bilingual Education

2.1 Background

The Social Component of Bilingual Education

In this section we set forth a historiographic and sociological background for working definitions of bilingual education for this planning study. The definitions will be applied operationally in the formulation of alternative plans for new research in bilingual education features to establish the scope of inquiry.

The concept of bilingual education is not a new one in the United States. The Pennsylvania School Law of 1837 placed German public schools on equal footing with the English public schools, and established schools in which German was the sole means of instruction. The Ohio statute of 1842 provided that children of German parents could attend school in other than their local district, if the German language was not offered in their home districts. In 1873, the Ohio Legislature required school commissioners to provide language instruction in districts where requested by at least 75 residents, for at least 40 pupils. The Cleveland school board ruled later on that all pupils must study German (as well as English) if at least 80 residents requested it. In 1870 the U.S. Commissioner of Education reported: (Zeydel, 1975) "the German language has actually become the second language of our Republic, and a knowledge of German is now considered essential to a finished education." By 1900, the number of pupils receiving German instruction in the public elementary schools was nearly a quarter million. As new waves of immigration arrived, their languages were also introduced into the public schools.

Thus early bilingual education in the United States was directly responsive to the expressed desires of the community and reflected their linguistic priorities. There was no conflict between maintenance of the German language and culture and their status as Americans. German was maintained as an "unmarked"* language by these programs and there was no compensatory content.

---

*Fishman initiated the use of the word "unmarked" to indicate a socially unstigmatized language.

All of this changed on May 7, 1915, when a German submarine sank the Lusitania off the coast of England. There was an immediate reaction against the German language and the German culture, and a tremendous impact on the teaching and study of non-English languages in public school. "It was not until the passage of the Bilingual Education Act in 1967 that bilingual education once again was considered a desirable educational alternative. The Act marked a major change in education policy in this country for the first time since the xenophobic outbursts of World War I had dedicated the schools to the eradication of all languages other than English." (National Advisory Council on Bilingual Education, 1979)

But the new legislation did not follow the historical model, with its objectives of cultural and linguistic maintenance. From its inception, the Bilingual Education Act has been closely tied instead to a "compensatory" approach. As part of the "Great Society's" new programs of the 1960's, the Bilingual Education Act was seen largely as a means to promote social justice, and more immediately, to help reduce social conflict.

The Bilingual Education Act reflects widespread legal and social attitudes in the U.S. Drawing on a number of court cases, Romero and Castro (1977) suggest that "the major thrust of bilingual education in the U.S. is the protection of civil rights for certain groups." Pena (n.d.) advocates mastery of the English language as the true goal of bilingual education programs. The State of the Art Report from the Austin Bilingual Resource Center identifies the primary goal as "to provide the LESA student (whose first language is Spanish) with an early opportunity to experience academic success by learning and having (Spanish) in school, while gaining proficiency in English language skills." (Tamara, n.d.) The regents of the State of New York echo this position: "The primary goal is to provide equal educational opportunity through activities capitalizing on their proficiency in their native language and developing competence in English." (N.Y. State Education Department, 1972) The National Advisory Council on Bilingual Education (1979) reports that "It has never been a goal of bilingual or bicultural education to establish and maintain a cultural identity different from the American mainstream."

Although this approach to bilingual education is currently well established in public policy, it has been rejected by a large number of bilingual education proponents, who would prefer to return to a concept of bilingual education that emphasizes cultural/linguistic maintenance (following the historical precedent) and a broader range of social objectives. Some believe that many of the programs represent a form of educational tokenism, falling into the class of Harkins' (1976) "rhetorical, limited opportunity system," described below.

> The key word for the rhetorical limited opportunity system is indeed "cost" measured in fiscal terms on the social surface, but in institutional and personal terms when the eyes and ears of the public are out of range. Lip service is paid to "innovation" and "risk-taking", but most functionaries know that this is rhetoric intended to pacify the usually small proportion of vocal publics seriously concerned with educational reform. Educational success is measured in terms of those variables which will publicly support the apparent merits of the formal system, casting doubt or blame upon "non-achievers" whose performances do not reflect well upon the a priori claims of the system to have isolated the most crucial variables of educational success.

But the more cogent objection of this group of bilingual education proponents is the failure of most current programs to reflect sociocultural or linguistic goals beyond those of a compensatory nature. In particular, many bilingual education advocates are concerned with the effect of public school instruction upon language use in other community domains. Since middle class American culture penalizes those who do not speak the standard language, one of the first goals of Bilingual Education programs should be, and is in most current legislation, that of teaching students the skills necessary to function adequately in all English classrooms. However, there is disagreement over other goals. Most proponents of bilingual education believe that concepts of cultural pluralism should replace those of the "melting pot," i.e. that bilingual students should have the option not to join a single monolithic English-speaking culture. From this perspective, "marked" languages are not just educational tools to be used in a transition to English, but should be an integral and continuing part of the curriculum.

The effectiveness of Title VII may have been limited by the failure of most programs to consider the social structure of the community in the development of curriculum materials. This failure may also have deeper consequences. The status of a cultural/linguistic group controls the future of its linguistic system. If a cultural group suffers from declining prestige, its linguistic system is stigmatized, corrected, and perhaps extinguished. If the group moves into the mainstream, and its culture is prominent and respected, then the linguistic system is incorporated in the dominant dialect of the language. Unfortunately, little research exists on diachronic effects (i.e. historical changes) of Bilingual Education on community linguistic systems or language related behavior and attitudes.

This instructional features study will be funded by Congress to provide information for the 1982 Title VII reappropriation hearings, and to contribute to the general body of knowledge about bilingual instructional features. As such, it might appear that the relevant definition of bilingual education for the study would follow Title VII guidelines, but this would in fact be a mistake. The guidelines derive from the attempt by Congress to provide equity for non-English-speaking and limited-English-proficiency children, and only those factors considered relevant by policy makers are included. However, these factors are in fact narrow. The transitional mode reflected in the legislation is not always the appropriate source for a holistic approach to equity. This narrow definition of equity must be considered in the context of the characteristics of the student, the community and the culture. The best way to determine the prescriptive policy measures needed to achieve equity is to understand the wide range of purposes and consequences for bilingual education in its various forms, across languages, cultures and aims. Thus the focus of the study should be instructional features in bilingual education--public, private, formal and nonformal, and their effects on students, and not the effects of Title VII programs. Expansion of the definition of Bilingual Education beyond Title VII reflects historical precedent, current trends in thinking among bilingual education proponents, and will result in a richer data base on which to ground a phenomenological study. The knowledge to be produced will be responsive to Congress in its legislative mandate to identify effective models for bilingual education.

The concurrent Title VII Instructional Component study being conducted by Development Associates, Inc. for the U.S. Office of Education, on the other hand, concentrates on Title VII evaluation. It is less concerned with variation within Title VII than the success or failure of the generic program in enabling LEP students to develop the skills they need to survive in all-English speaking classrooms. The NIE study and the USOE studies should take complementary approaches to the research to be performed.

The operational use of the definition of bilingual education will be to denote the limits of the study's scope, and not to define an educational "treatment". Any definition that is broad enough to be of optimal use in the features study is too broad to be considered a "treatment." To gain analytic strength, the variation of features within the definition should in fact be maximized, so that the broadest view of the phenomenology of instructional features is obtained.

In fact, we argue for the most inclusive definition of bilingual education, one that concentrates on the linguistic minority child, and not the project. In this conceptualization, the child is seen as the focus of a system that includes not only schools but most other community institutions such as churches, clubs, temples, Saturday schools, family, and other institutions that have significant consequences for language development. Nearly every linguistic minority child is learning English, somewhere in the social system, inside or outside public school bilingual education. A comprehensive study of the phenomena that influence the linguistic minority student would include all contexts, formal and informal, where learning takes place. Instead of trying to generalize to a population of projects (the objective of Title VII evaluation) the study would concentrate on the total educational support system for the limited English proficiency (LEP) student. The universe of generalizability would consist of the population of linguistic minority students, and the subpopulation of LEP students.

2.2 Definitions of Bilingual Education

In this section, three alternative definitions of bilingual education of increasing inclusivness are presented. The first emphasizes the intent of Title VII. The last is a comprehensive definition that we (AAI) think reflects American history, current social trends and the thinking of bilingual educators. It is intended to provide a holistic view of the linguistic minority student in his or her total educational context. Since the definition is to establish a scope for the instructional features study, the argument for an inclusive definition is, really, an argument for a study of wide scope.

The narrowest reasonable definition reflects the objectives of Title VII. Its adoption would lead to identification of the Title VII universe of projects, and the students in them, for the scope of the study. This definition is as follows:

> First Definition Bilingual education is a pedagogical process where two languages are used to help limited English proficiency (LEP) children acquire the skills necessary to perform successfully in all-English classrooms, and to improve their academic performance, thus improving their long term life changes.

The relation to the Title VII language, quoted below, is clear.

> The term 'program of bilingual education' means a program of instruction, designed for children of limited English proficiency in elementary or secondary schools, in which, with respect to the years of study to which such program is applicable -
>
> (i) there is instruction given in, and study of, English and, to the extent necessary to allow a child to achieve competence in the English language, the native language of the children of limited English proficiency, and such instruction is given with appreciation for the cultural heritage of such children, and of other children in American society, and, with respect to elementary and secondary school instruction, such instruction shall, to the extent necessary, be in all courses or subjects of study which will allow a child to progress effectively.

(ii) the requirements in subparagraphs (B) through (F) of this paragraph and established pursuant to subsection (b) of this section are met.

(B) In order to prevent the segregation of children on the basis of national origin in programs assisted under this title, and in order to broaden the understanding of children about languages and cultural heritages other than their own, a program of bilingual instruction may include the participation of children whose language is English, but in no event shall the percentage of such children exceed 40 per centum. The objective of the program shall be to assist children of limited English proficiency to improve their English language skills, and the participation of other children in the program must be for the principal purpose of contributing to the achievement of the objective. The program may provide for centralization of teacher training and curriculum development, but it shall serve such children in the schools which they normally attend.

If the First Definition were adopted, the study would miss much of the total phenomenology of bilingual education, and would be unnecessarily constrained regarding the objectives of different programs. Furthermore, although there is wide variability within Title VII-oriented programs, many programs with relatively unique features would be excluded. This definition should be expanded, not only to represent a wider spectrum of bilingual education as it exists, but to increase the research base for studies of instructional features.

The definition given by NIE liberalizes the First Definition by broadening the range of sponsoring agencies, while retaining emphasis on LEP students. By excluding the statement of objectives of the compensatorily oriented Title VII definition, it expands the scope to include programs with maintenance goals -- even those that include no English language component.

Second Definition (NIE)

- o bilingual education program: a program intended primarily for language minority students with limited English proficiency. Although most bilingual programs are in grades K-6, programs which extend to grade 12 or which are intended for secondary level students alone are also of interest. For the purpose of this

> study, such programs include, but are not limited to, those supported through Title VII funds. Bilingual education programs could also include classroom activities supported through LEA or SEA funds, community base programs supported as demonstrations through NIE, USOE, or other methods.

A similar definition was made by USOE (1971), except that the USOE specifies that the program involve instruction in two languages.

> [Bilingual education is] the use of two languages, one of which is English, as mediums of instruction for the same pupil population in a well-organized program which encompasses all or part of the curriculum and includes the study of the history and culture associated with the mother tongue. A complete program develops and maintains the children's self-esteem and a legitimate pride in both cultures.

These definitions are operationalizable in the instructional features study by conducting a survey of programs sponsored by LEA's, SEA's, and other public and private agencies to establish a sample frame. The magnitude of this effort could be reduced by sampling geographical areas first and conducting the survey only in a limited number of locales. The definition is useful, and workable for the study, but may miss linguistic minority students (particularly non-Hispanic students) who are not enrolled in conventional bilingual education programs. The following definition would include all such students:

> Third Definition Bilingual education is the formal or informal process of instruction that the language minority student in the primary or secondary school years encounters, and that have tangible consequences for the language development of the student. Bilingual education programs may occur in any context: public, private or parochial school, community organizations, church or synagogue, Saturday school or any other institution. Their objectives may include cultural, social, linguistic, academic, attitudinal, or affective elements or any other positive consequences for students.

Since this definition includes mainstream monolingual education as it is actually encountered by the language minority student, it would seem to be of questionable value as a definition of bilingual education. The mainstream classroom can, however, be regarded as a type of immersion treatment not unlike those that have been successful for Anglo students in Canada. The working definition is not intended to define good bilingual education, but rather to indicate the scope of educational settings that should be considered in the instructional features study. the definition, in other words, concentrates on the student and not on the project.

This definition is not so difficult to operationalize as it might first appear. In Planning Paper 3, a student-oriented sample design, based on the Office for Civil Rights (OCR) school survey, is presented. It can be used to locate schools and school districts where large numbers of LEP students are located, regardless of the types of programs in which they are enrolled. From the public schools, one can move, through site level investigation, to the community context and its components that promote learning. These would be included in a comprehensive study, based from its inception on an anthropological/ethnographic, as well as an educational, framework.

2.3 Implications for Design

The selection of an operational definition for bilingual education to be used in the instructional features study is critical because it affects the basic orientation of the study, and its total scope. The working definition adopted indicates the range of formal and informal language resources that should be examined in relation to the education and language development of the student. The following paragraphs indicate the specific implications of adopting each of the three alternative definitions.

(1) If the First Definition is adopted, then the scope of the study is limited to programs whose objectives parallel those of Title VII of the ESEA. For all practical purposes, the universe of projects under this definition consists of a combination of Title VII projects and those sponsored by other agencies that reflect the principal objectives of the legislation--transitional programs. The first step in conducting the study would be to construct this sample frame and to select a study sample of projects. The implementation of Definition 1 would thus be technically simple, especially if the sample frame were limited to Title VII projects per se.

The usefulness of the study would, however, suffer if Definition 1 is adopted. Some of the specific problems follow.

- First, the definition would exclude programs that are in fact of consequence for language minority students. Many of these programs include features that are not present in transition-oriented programs (or are present in token implementation). By excluding such programs, the range of instructional features that can be examined is narrowed, and analytic power to see their effects would be substantially attenuated.

- Second, the definition excludes various forms of maintenance programs. These programs are of great interest to practitioners and bilingual education researchers alike. While they represent a minority of those currently available, they may indicate routes to be taken in the future, perhaps even in federal legislation. One instructional features study objective is to produce guides for improvement of bilingual education instructional practices. The capacity of the study to address this objective would be weakened if it did not include innovative programs outside the legislative mandate. The credibility of the study to researchers and practitioners would be reduced.

- Third, the definition concentrates on the project rather than the student (in common with the Second Definition). Inevitably, analyses would concentrate on project characteristics and not the social context in which the student lives. A better definition of bilingual education would explicitly recognize that (1) the school is only one locus where language acquisition occurs and (2) many of the potential clients of bilingual education are not now participating in projects.

(2) The Second Definition, provided by NIE in the RFP for this planning assistance study, provides for a less constrained instructional features study by enlarging the scope to include any school programs intended for language minority students, regardless of the objectives of the program. Thus programs that concentrate on maintenance or even restoration of the native language are included, even though there may be no attempt to teach the skills necessary for the student to be mainstreamed.

Furthermore, the definition specifically includes projects that may be community based, no matter what their source of funding. The community non-English language resources (churches, community halls, Saturday schools, social clubs, etc.) that Fishman (1979) is currently studying are specifically included.

The first implication for design is that a much larger sample frame would have to be constructed than under the First Definition. This would require identification of perhaps hundreds of sources of information and the expenditure of considerable resources, and may not be possible within the constricted time frame planned for the instructional features study.

The second implication for design is that data collection and analytic methods would have to be expanded beyond those required under the First Definition. It would not be possible to study institutions outside the conventional school setting with the same instruments and observation techniques within the school. Case study methods, particularly ethnographic and anthropological techniques, would be required.

(3) The Third Definition provides a student focused perspective to bilingual education. It includes all of the institutions and contextual features included in the Second Definition, plus any additional informal programs or activities that matter in students' lives. There are several principal implications for design.

First, if the study is to concentrate on minority language students, rather than on students enrolled in bilingual programs per se, then the sample frame should be constructed to simplify identification of areas where language minority students live, whether or not they are in bilingual education projects. This approach favors the choice of geographical areas, rather than projects, such as cities, counties, or LEA's as primary sampling units, so that all language minority students in the area are potential study subjects. The OCR survey file discussed above offers a means to locate LEA's where language minority students are concentrated. However, one would also wish to include language minority students who are relatively isolated.

Second, the definition requires a design approach that includes a strong student case study component, so that all social institutions that influence educational or linguistic consequences for students can be identified and examined. Just as with the Second Definition, the study would require extensive use of ethnographic and anthropological methods.

3. Consequences for Children

3.1 Background

The Social Perspective

When one generation hands on its cultural heritage to the next, three more or less distinct transactions are involved. First, the society passes on its material goods. Second, it transmits culturally determined behaviors. Third, and most significantly, the society passes on its particular conceptualization of the universe (Weltanschauung). This includes the elements that reside in the range of meanings and attitudes that members of any society attach to their verbal symbols--not only customary behavior, but also concepts such as space and time, and generalized goals and aspirations. In Durkheim's (1915) words, these categories of understanding are "priceless instruments of thought which the human groups have laboriously forged through the centuries and where they have accumulated the best of their intellect capital." The continuity of these categories of understanding from one generation to the next depends primarily in its embedding in language, the most direct and comprehensive expression of the group social experience (Goody and Watt, 1962-63). For the speakers of "marked" (Fishman, 1966) languages, the continuity of the categories of understanding may be threatened by assimilation. In the view of many proponents, the maintenance of cultural continuity should be a primary consequence of bilingual education. Thus the consequences of bilingual education for children need to be addressed not only at a short term, immediate, level of achievement scores, school retention, and the like, but within the larger context of the transmission of culture.

Although emphasis has been placed in incorporating a "cultural component" into many bilingual education programs, little serious research has been conducted in the areas of cultural transmission and the consequences for children's later ascription values (patterns of attribution of events to sources or causes). The instructional features study should consider the long-term consequences of the transitional program's approach to

cultural and linguistic assimilation, as opposed to those of maintenance programs. Long term sociocultural effects should be linked to the more commonly cited socioeconomic effects in formulating the definition of the consequences for children of bilingual education. Short term consequences should surely not be excluded--they are, after all, measureable and may be useful as surrogate variables--but they should be seen in their long term social context.

The Academic Perspective and Life Chances

Educational institutions in the United States are influenced by the need for education that produces the expertise that is indispensable for modern bureaucracy.* Growing evidence suggests that "new" and "relevant" curricula, i.e. "non-elite" education, may restrict the supply of qualified persons for socially and economically advantageous positions, which are usually held by persons who have pursued more elite, traditional educational careers. Evidence that education has been used as a mean of cultural selection may be found in many sources. (See, e.g., Boudon (1973) and Persell (1977).)

The definitive new work by Jencks (1979) clearly shows the relation between total years of education and economic success. Thus examination of the potential of bilingual education for helping "marked" populations in the attainment of continuity of education from kindergarten to the post secondary level is an important factor for future life chances. No bilingual education study can ignore this major outcome for students.

The recent research results confirmed those built up, on less firm methodological grounds, in the preceding three decades. Hollingshead's (1949) study of Elmtown school children shows that employers use education

---

*Max Weber had already commented about the phenomenon in Europe in 1922. See H. Gerth and C.M. Mills, From Max Weber: Essays in Sociology (Routledge and Kegan Paul, 1948), pp 240-44.

as a means of selecting employees with middle-class attributes. A survey of employers in nationally prominent corporations indicated that they regarded college degrees as important in hiring potential managers, not because they were thought to ensure technical skills, but rather to indicate "motivation" and "social experience." Ladinsky (1963) reports that among lawyers, predicted differences are clear: graduates of the law schools attached to elite colleges and universities are more likely to be employed in prestigous firms than graduates of Catholic or commercial law schools. These examples are all part of a clear cut pattern linking elite education with more desirable jobs, beyond the actual training imparted. In fact, better educated employees are <u>not</u> generally more productive, among samples of factory workers, maintenance men, department store clerks, technicians, secretaries, bank tellers, engineers, independent research scientists, military personnel and federal civil service employees (Berg, 1970). Approximately 60 to 70 percent of the American business elite come from upper-class and upper-middle-class families, and fewer than 15 percent from working-class families (Cosin, 1972). Thus education may be regarded more as evidence of membership in an elite group than of specific technical skills or achievement. Most linguistic minority students do not, as a birthright, belong to this group. Therefore, if they are to join it, education must provide the means.

The value to students of academic instruction depends on their personal agendas, which are in part consequences of the educational process. Coleman (1964) found that attitudes of high school students towards academic achievement, and their appreciation of adult values and expectations, depended on the congruence of these attitudes with their feelings about what is socially rewarding. The most able persons tend to compete in activities that offer the greatest social rewards. The congruence between school-culture and community-culture will, therefore, tend to determine the effectiveness of the school. Thus bilingual education in the classroom needs to be examined vis-à-vis the culture of the community.

The existence of subcultures comprising groups of people who share a sense of status equality and of participation in a common culture, gives individuals their fundamental sense of identity, particularly in distinction to individuals from other groups in whose culture they do not participate comfortably. Max Weber has identified three sources for such associational groupings:

1) Differences in life style based on economic situations.

2) Differences in life situations based on power position.

3) Differences in life situations deriving from cultural conditions or institutions, such as geographical origin, ethnicity, religion, education, or intellectual/ aesthetic cultures.

Thus the influence of schools on the student's relation to particular status cultures (both in and outside the classroom) is one of the most profound consequences for students. The influence is strongest when the style of the education is closely identified with the status group that controls employment.

Traditionally, members of the working and lower-middle classes have recognized this and have seen educational attainment as a means for upward social mobility. Thus social consequences of education might involve any of the following processes:

1) Enhancing the chance of upward movement in the educational ladder.

2) Fostering the acquisition of the values and manners of particular status cultures, insuring a congruence between the educational culture of employers, and the educational culture of prospective employees.

3) Facilitating induction into groups or subcultures associated with the educated elite.

The earliest test of successful induction into the status group is the success of the student in schools maintained, for the most part, by the majority group. Thus, even though grades and academic performance may not be accurate indicators of individual worth, they are crucial early indicators in the track that leads to success in the socioeconomic system. Clearly, then, academic success per se is among the most important consequences to be considered. The degree to which bilingual education can convey to the student the importance of academic success as a key to progress through the educational system, is also a crucial consequence.

The Linguistic Perspective

Occasionally the study of bilingual education has been shaped by a conception emanating from the perceived negative effects resulting from knowledge of two languages. Bilingualism has been viewed as a cause of interference leading to language and cognitive handicaps. For example, see the research reviews by Darcey (1953), Worrall (1972), Peal and Lambert (1962). The "balanced effect" hypothesis (McNamara, 1966) explains and measures psycholinguistic differences between monolinguals and bilinguals by proposing that a child pays for his L2 skills through a decrease of L1 skills. This hypothesis is important in understanding the need for monitoring acquisition of the native language as an important variable in the study of significant features of bilingual education. McNamara's hypothesis has not yet been subjected to a rigorous field test. A useful longitudinal substudy would address this issue directly and is proposed in Planning Paper 4 of this planning assistance contract.

3.2 Definitions of "Consequences for Children"

The previous section provided an orientation towards "consequences for children" focused on long term cultural and linguistic results, and on direct socioeconomic effects. Immediate effects, during the school years, are only the first milestones towards the long term goals. Since long term effects cannot be measured in the instructional features study, short term surrogates must be substituted in analyses. Among these variables are those listed by NIE in the RFP: perceptions of specialness; attitudes towards school, friends, family, community, and culture; language use in the same domains; and performance on achievement tests. The problem in designing the instructional features study is not in understanding what should be the ultimate consequences of bilingual education, so much as to determine which available, short term, measures most closely relate to more important long term consequences. The NIE suggestions are an attempt to nominate some of these critical variables. The bilingual features study should follow NIE's lead, and select variables that are most likely to have enduring effects on the life of the student and his or her culture.

Domains of variables specifically to be included are the cognitive, affective (particularly regarding attitudes toward self and culture), language use, language proficiency (L1, L2), academic success, life chances surrogates (e.g., grades, absences, disciplinary encounters, drop out rates), sense of social identity and role relations, personal agenda, and general world view (Weltanschauung). These variables should be considered in a variety of contexts, including the school, its environs, the family, and the community. The spectrum of variables to be considered should be as broad as possible.

Thus, the consequences to be assessed in the instructional features study should not be limited by our power to conceptualize but by our ability to measure or observe. In many previous studies, the designers have appreciated the importance of a broad spectrum of dependent measures

but have foundered in their attempts actually to use them. Tests like the Coopersmith and the Intellectual Achievement Responsibility Scale (IARS) "cover" important conceptual areas, but are not generally recognized as valid. Studies which used them have been criticized severely. The problem of consequences for children in the instructional features studies is thus not so much a conceptual one as a practical one of instrumentation.

The definition of "consequences for children" implicit in Title VII derives from the reasonable assumption that teaching English language skills is the first goal of bilingual education. This goal is one of those that any government-sponsored bilingual education program should pursue, since it is unequivocally linked to the life chances of the student. The first definition to be presented broadened this goal only slightly. It represents an interpretation of the objectives of Title VII, stressing the compensatory aspects of the legislation.

First Definition (bilingual education as compensatory education)

> The consequences for children that bilingual education aims to secure include (1) appreciation for their own culture and cultures different from their own, (2) acquisition of the skills neccessary to perform successfully in all English speaking classrooms, (3) academic performance in content areas such as reading, mathematics, and social studies, and (4) long term impact on life chances. Bilingual education is essentially compensatory for the social and economic penalties that may be incurred by membership in a linguistic minority group.

This definition does not capture the range of sociocultural objectives expressed by the bilingual education community, nor does it sufficiently emphasize the goal of maintaining the native language. The long term impact on the students' life and culture should also be considered as important consequences of bilingual education. The following definition is an attempt to represent this point of view.

Second Definition

The long term consequences of bilingual education for students include substantial effects on the social, linguistic, and attitudinal, or economic status of the student, and, collectively, any substantial effects on the social status, cultural status, or linguistic variety of the student's culture. The short term consequences include any effects that alter the student's life immediately or bear substantially on the long term consequences.

3.3 Implications for Design

The implications for design of the two alternative definitions of consequences for students are not markedly different, even though the definitions are from different philosophical positions. In either case designs are limited by the availability of valid and reliable measures. In either case student tests must be supplemented by "soft" data from interviews with students, parents, and teachers; informal and formal observations; collection of data by participant researchers; and, especially, student case histories. Both definitions also emphasize potential long term significant consequences of bilingual education, particularly on the student's ultimate socioeconomic status. Therefore, both call for (1) initiation of a longitudinal study of a subsample of students through a period of several years, (2) short run emphasis on "life chances" surrogates such as grades, absences, drop out, etc., and (3) the inclusion of students from the whole range of kindergarten, primary, and secondary grades.

These emphases are not meant to replace "hard" measures but to supplement them. Section 3.1 argued for inclusion of academic performance measures as life chances indicators if not for assessment of immediate outcome. Furthermore, in the opinion of nearly all persons consulted in preparing this product the importance of language proficiency measures in both English and the native language was emphasized. There are, of course, problems with validity and reliability both for academic performance and language proficiency, particularly for non-Hispanic languages. These problems are discussed in Planning Papers 3 and 4 of this series.

Either of these definitions would be difficult to implement in the study. The first calls for identification of a broad base battery of tests and measures covering student attitudes and self-concept, language proficiency in English and the native language, and academic performance, as well as a variety of softer measures. Because of the need to consider the reliability and validity of the measures carefully; to gain acceptance of them by meeting with members of the languages and cultures involved; and to clear them through several governing authorities, it will not be feasible to assemble the entire battery in time for the first year of the study, 1980-81. If tests are to be included they must, for the most part, be identified and specified in time for use in the 1981-82 academic year. This implies that a two year data collection plan is required. Such a plan is presented in Planning Paper 4.

The second definition is even broader, since it calls for examination of "any substantial effects on the social, linguistic, attitudinal, or economic status of the student." The entirerange of variables discussed under the First Definition is included in the Second Definition as well, and requires the same approach to construction of a battery of tests and measures. But the definition implies that there may be tangible consequences for students beyond those considered in the First Definition. These must be identified in the course of the features study, which must therefore include exploratory case studies of students, preferably longitudinal. These studies would be used specifically to extend the framework of consequences to be considered. Again, a two year data collection effort is indicated.

Furthermore, the Second Definition specifically includes effects on the students' language and culture as well as directly on the student. Under this definition, then, the language and culture of the community became necessary objects of study. The design should therefore include specific substudies of the community context of the student, and the interrelated attitudes of all participants of the bilingual education process.

4. Instructional Features

4.1 Background

Monolingual instructional research education has in the past few years made progress along the route associated with the names of Wiley, Berliner, Cooley, and Leinhardt. Their definitive research has helped to erase disappointment in earlier (interactional) observation studies, where the lack of definitive results appears to have stemmed from two sources: insufficient attention to the stability and generalizability (stability) of measures, and insufficient knowledge about the variables that capture the most fundamental features of the process.

Most earlier research failed to find many relations, either positive or negative, between product and process domains, especially with variables describing teacher behaviors. A reasonable explanation for this was that the generalizability of measures was low, so that correlations among them were substantially attenuated. To rectify this, Medley (1977) conducted a process-product study of teacher behavior, in which each measure had a calculated generalizability of at least .7, so that attenuation was ruled out. This approach succeeded in making many relations out as the major source of null findings. In fact it was determined that although an overall factor in teacher behaviors ("competence") was related to student achievement, specific behaviors were related to outcome in perplexing and counter-intuitive ways. The puzzle in fitting these interaction measures into an understandable model apparently originates in the complexity of the process and the role of individualization.

Both the BTES and the instructional dimensions study (IDS) were based on relatively simple theoretical models of the instructional process (Berliner; Leinhardt, 1978). While the BTES focused on the use of instructional time, the IDS used the global process model exhibited in Figure 1.

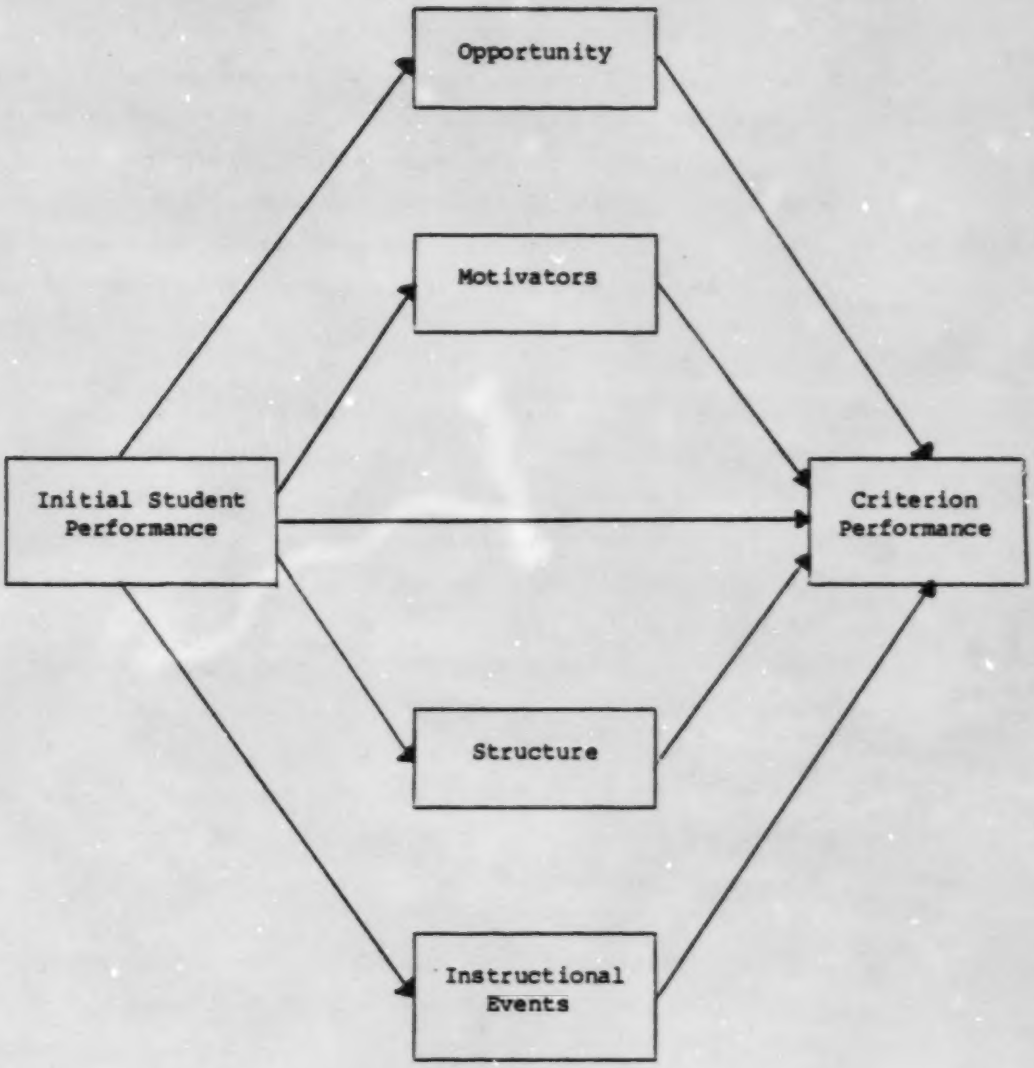

Figure 1. Model of classroom processes
(taken from Cooley and Lohnes 1976, p. 191.)

In both studies, the generalizability of measures was calculated and ungeneralizable measures discarded. Both of these studies succeeded in finding understandable relations between process and product, not just because the variables were generalizable, but because they clearly captured fundamental classroom instructional features. A combination of the BTES and IDS approaches, concentrating on instructional time, is a useful starting point in developing a conceptualization of bilingual education instructional features. In itself, however, this approach is not adequate for studies of bilingual education. The approach must be extended and modified in three ways.

(1) First, time use in the classroom should be broken down not only by subject matter, time-on-task, etc., but also by language of instruction. The need for a breakdown by language is clear. It will yield a profile of relative emphases on the two languages, differentiated by content area (basic skills, cultural/historical, social studies, etc). These time profiles, examined in grade-by-grade progression, will be an effective way to classify program types. For example, Fishman's (Table 1) classification would be easy to recognize. Table 2 gives simplified examples of time-use profiles across aural-oral/reading-writing content areas and L1/L2, to ilustrate patterns that might be found. The complexity of profiles that could be constructed is limited only by the ability to break down total time use into smaller and smaller segments.

(2) The second extension is to include important qualitative features in the classroom. At the minimum, these would characterize participation structures (Mehan, 1979) and linguistic interaction patterns. In this framework, communicative competence, social conditions, and the degree of congruence between classroom and community would be described. Simple counts of teachers, aides, and students by subgroup would be specified, and would yield knowledge about subgrouping practices by content area and language. The AIR study has already demonstrated that subgrouping is a significant feature in Bilingual Education.

Societal Objective = language shift	Type I - Transitional bilingualism	These programs do not strive towards goals of fluency and literacy in both language, but are basically interested in arriving at a state of English monolingual normality just as soon as is feasible without injuring the pupil or arousing the community.
Societal Objective = language maintenance in the short run, but might well lead to shift.	Type II - Monoliterate bilingualism	They indicate goals of development in both languages for aural-oral skills but do not concern themselves with literacy skills in the non-English mother tongue.
Societal Objective = language maintenance with a certain effort at cultural maintenance.	Type III - Biliterate bilingualism, partial	Seeks fluency and literacy in both languages, but literacy in the mother tongue is restricted to certain subject matter, most generally that related to the ethnic group and its cultural heritage.
Societal Objective: language maintenance and development of minority language.	Type IV - Biliterate bilingualism, full	Students are to develop all skills in both languages in all domains.

Table 1. Fishman's (1976) Classification of Bilingual Education Programs.

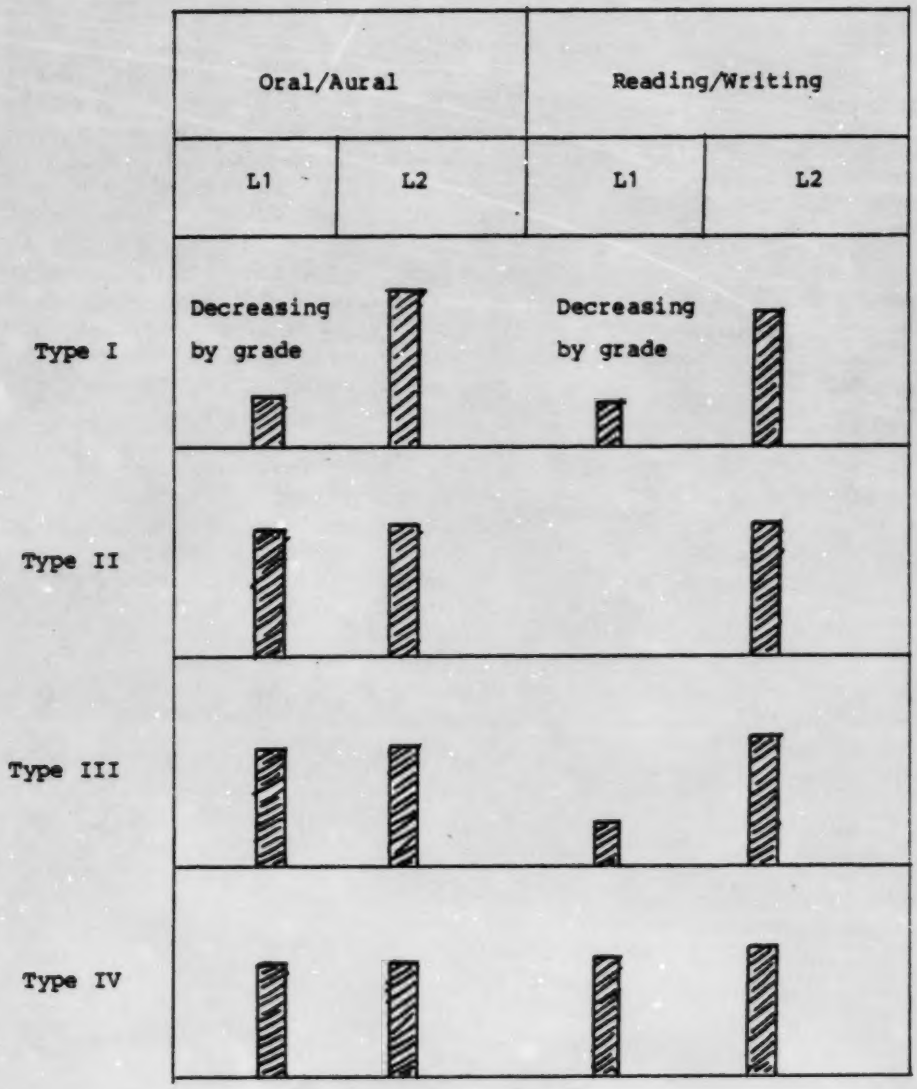

Table 2. Examples of Time Use Profiles for Fishman's Classifications

(3) The third extension is to the context surrounding the classroom including the school and its environs, the family, and the neighborhood. This requirement has been fully discussed in earlier sections of this report.

Within the classroom, the instructional features domain may include such variables as the size and configuration of space; the fit between teachers' ethnicity and degree of linguistic mastery of the students; exposure to cultural items; choice of language of instruction (by content area); acceptance of dialects and of "modeling." Outside the classroom the domain may include degree of involvement and real decision making power from parental and community quarters; administration/staff attitude towards the program; program management characteristics, level of funding; and children's language use outside the classroom. These are only a few examples from a vast array of possibilities, selected to characterize the domain, not to define it. A content analysis of the features that have been discussed and analyzed in the literature is presented in Planning Paper 2. We can classify significant instructional features in terms of place (classroom, school and playground, family, and community) or by substantive locus (linguistic, social, and pedagogical/cognitive). The next paragraphs are organized according to the latter scheme.

Linguistic Locus

Dealing with the linguistic locus in the bilingual classroom requires a theory that can deal with heterogeneous speech communities, differential competence, and the constitutive role of sociocultural features. It should take into account socioeconomic differences, relative competency in L1 and L2, expressive values, socially determined perception, contextual styles, and shared norms. Since the nature of linguistic competence varies across cultures, language use should be examined in its sociolinguistic context. The two interrelated features listed below are especially significant in describing language use in bilingual instructional settings.

(1) Verbal repertoire - the set of different linguistic varieties or codes on which the individual may draw, and the types of switching that occur among them.

(2) Domains of Language Use - a parsimonious designation of the occasions in which a linguistic variety or code in a verbal repertoire is habitually chosen.

The characterization of these variables for teachers and students, inside and outside the classroom, will capture important overall features of the linguistic interactions. The analysis involved should not be confused with the traditional educational interaction approach. The focus is on purely linguistic features from an ethnographic/sociolinguistic perspective.

The Social Locus

The features discussed above belong to the area of communicative competence. There might seem to be little point in separating linguistic features from social features, since language is intrinsic to the social, but there are social features that require additional, special attention. One would examine the social context as a defining mechanism, and embed the classroom analysis in it. What is the social function of the monolingual/bilingual child? How does a bilingual program impact the involvement of the child in two languages, diglossic* or otherwise? Is the outcome true bilingualism, or is it merely a functional distribution of language use? How do successive generations differ in language use? Which are the non-formal support mechanisms in the communities that foster bilingual education? To what extent do patterns of endogamy and exogamy influence language shift?

---

*The term diglossia was coined by Charles A. Ferguson in 1959 to denote varieties of language within a community, specified according to use (purpose, function).

The Pedagogical/Cognitive Locus

The pedagogical/cognitive locus of bilingual education features is familiar to most educational researchers. As discussed above, an obvious starting point is the monolingual instructional dimension research, teacher competency research, etc., but extensions and elaborations are needed for bilingual education studies. For instance, instructional time-use needs to be differentiated by the language used in transactions. Teacher qualifications to be examined should emphasize linguistic elements, include reading, writing, speaking, and listening in both L1 and L2. These extensions are not complex, and do not need further exposition.

4.2 Definitions of "Instructional Features"

The first definition of the term "instructional features" focuses on the classroom.

> First Definition "Bilingual Instructional features" refers to the teaching and learning process that occurs in the bilingual classroom, including any classroom characteristics and behaviors that have consequences for linguistic minority students.

This definition is useful and concentrates on the classroom domain, where most instructional research has also been focused. But, in the opinion of most persons consulted, it is too restrictive for a study that concentrates on language and culture, where much learning occurs outside the classroom. An extension of the definition is:

> Second Definition "Bilingual Instructional features" refers to the teaching and learning process that occurs in and around the school (classroom, playground, gym, cafeteria, administrative offices, etc.), involving linguistic minority students.

This definition still does not take into account the fact that the student receives language instruction (formal and/or informal) in the street, at home, and in the community (e.g., in Saturday schools). We can expand the definition still further:

> Third Definition "Bilingual Instructional features" refers to the entire teaching and learning process that involves the linguistic minority student, whether formal or informal, in the classroom, the school, the home, and in the community.

In this definition it is recognized that students' linguistic competence, and language proficiency in L1 and L2, is acquired in a variety of contexts and that a comprehensive study should include all significant learning contexts. This definition may be difficult to implement because out-of-classroom measurement technology is not well developed. Operationalizing the definition would immediately involve ethnographic and anthropological studies of the community and the playground, as well as qualitative and quantitative in-classroom studies. While this approach is within the state of the art, its complexity cannot be minimized.

4.3 Implications for Design

The three definitions for instructional features imply three different physical domains for identification of features and their consequences. These are (1) the bilingual education classroom, (2) the classroom and its extensions, and (3) the entire environment of the student where learning takes place.

These same domains are involved in establishing the study design alternatives that derive from the choice of a definition of "Bilingual Education." Therefore, the choices of working definitions of the two terms must be coordinated. If "bilingual education" implies formal bilingual education projects, then the examination of instructional features might concentrate on the bilingual education classroom, or the classroom and its

extensions. If "bilingual education" is approached from the perspective of the student, however, then it would be mandatory to consider instructional features in whatever domain bilingual education is examined. In other words, one would have to select the third, most general definition of bilingual educational features. The design implications of adopting the Third Definition are that (1) contextual studies should be included in order to study features from outside the classroom, (2) student case studies should be included to determine which features of the out-of-school environment matter in the lives of the students, (3) anthropological and ethnographic techniques, or other exploratory methods, are required to determine the significance of contextual features for students, and (4) techniques must be found for combining the qualitative, exploratory components of the analysis with confirmatory components.

4.4 Definitions of "Significant"

Webster's New Collegiate Dictionary (1979) definition of the term "significant" is

> Significant - Having or likely to have influence or effect: important, weighty. Probably caused by something other than mere chance.

The definition suggested for this planning study specializes the general definition to the field of bilingual education, but does not change its meaning:

First Definition

> Significant means important instructional features, those likely to have consequences which are substantial and meaningful in children's lives.

We have concluded that this definition is useful and appropriate for use in instructional features studies just as it stands, provided the terms "instructional features" and "consequences" are given operational

definitions. Unfortunately, the term "significant" has other meanings in educational research, and these should be examined in order to avoid confusion. This confusion has mostly arisen between the concepts of statistical significance and practical significance. A quantitative "effect" is statistically significant at the level of (say) .05 if a standard statistical hypothesis test results in rejection of the null hypothesis, where the test is constructed to limit rejection by chance alone to a probability .05. Thus statistical significance has more to do with the sample size than the size of the effect. For a large enough sample size any "effect," even those that do not truly exist, is "statistically significant," unless the research design is perfectly controlled, and the statistical model exactly correct. The magnitude of the effect is of far greater practical importance than its statistical significance when samples are large. Despite this, much of the literature and practically all of the popular media, describe results as "significant" when they actually mean "statistically significant." The use of the word "significant" in the instructional features study must make this distinction clear when research results are reported.

A second use of the word "significant" is in the phrase "practical significance." This use comes closer to the meaning of the term as it should be used in bilingual education studies. An effect has "practical significance" if its magnitude is deemed great enough to have practical "consequences. NIE uses the phrase "consequences for children which are substantial" to indicate practical significance. The problem of specifying the degree to which consequences for children are "substantial" or "practical" must be squarely faced. It should be agreed upon beforehand what will be considered to be of low, medium, or high practical significance, both for quantitative and qualitative consequences.

Unfortunately this does not solve the problem of determining whether a given feature is significant. To do so, one must connect existence or variation of a specific feature causally to consequences for students. This raises two problems. First, in naturalistic, retrospective designs like those contemplated for the instructional features

study definitive statements about causal relations cannot be made. Instead, one must make weaker causal inferences based on associational analyses. While this compromise has been generally accepted in educational research, there are special problems in an instructional features study. There are so many statistically correlated features that it will be difficult to ascribe the cause for a given effect to any one feature. Thus we lack the ability to determine for certain whether a specific feature actually causes an observed consequence. That is why the First Definition uses the phrase "likely to have consequences" and not "have consequences." As a result, the definition is inconvenient to operationalize. It relies too much on the opinions of researchers (however informed) about what is "likely."

A different approach may serve the purposes of the study better. Consider a large and diverse sample of bilingual and monolingual projects. Suppose that each project and its context is observed in detail by an ethnographer, for a period long enough for all of its features to be manifested. Now suppose the ehtnographic protocols are content-analyzed to determine a consistent framework of features that describe the recorded phenomena. These features could be termed "phenomenologically significant" because they are a parsimonious organization of observed phenomena, i.e., they describe the process economically.

> Second Definition An instructional feature is phenomenologically significant if it parsimoniously describes classroom, school, or community phenomena in bilingual education, and it is conceptually generalizable.

This definition, unlike the earlier ones, can be readily operationalized (by actually conducting the exercise described in the last paragraph) and is consistent with a phenomenological approach to the instructional features study.

4.5 Implications for Design

The two definitions imply two different philosophical approaches to the instructional features study. In the first, a feature is "significant" if it has tangible effects — i.e. the definition is product-oriented. In the second definition, a feature is "significant" if it seems to be an indispensable component of the phenomenology of the classroom or its context — i.e. the definition is process-oriented.

If the first, product-oriented definition is selected, then the possible effects of each feature must be judged in order to determine whether or not a given feature is significant. Since the research base for the effects of particular features is weak (See Planning Paper 2), there will be little empirical knowledge on which such judgments can be based. On the other hand the second, process-oriented definition is not difficult to implement. This definition is in fact nearly identical to that used implicitly by classroom ethnographers who judge a feature significant if it is a stable or recurrent phenomenon that seems indispensable in understanding events of the classroom. If this definition is adopted a framework of "significant" instructional features can be constructed in the straightforward manner presented in Planning Paper 4.

5. Model

5.1 Background

Weil and Joyce (1972) present the following definition of an educational model, which expresses succinctly the manner in which the word is generally used among both teachers and researchers.

> Model — "A pattern or plan, which can be used to shape a curriculum or course to select instructional materials, and to guide a teacher's actions."

The RFP for this planning project included a definition from a similar perspective.

> Models: the definition can suggest highly specified instructional programs in which educational philosophy and all aspects of educational practice (from entry through instruction to assessment) are spelled out. . . .

The common element of these two definitions is the characterization of the model as a controlling device, i.e., as a guide for teachers' actions. A member of the bilingual education advisory panel pronounced, simply, that "A model is a bureaucratic representation." This pronouncement seems to indicate that an educational model is only bureaucratic, i.e., that it does not have much to do with the actual phenomenology of the classroom.

The model defined by this approach will be termed an "administrative model" in this report. An administrative model can have been developed in one of two ways. It may either be based on hypotheses about bilingual education that have not yet been empirically verified, or it may consist of specifications of a pattern of classroom features that have proven effective. The model, although it is used administratively, may be empirically derived.

However, the review of the research literature presented in Planning Paper 2 (A Bibliography of Significant Features in Bilingual Education Programs) shows that there are few data on bilingual education that tie specific instructional features to consequences for students. Therefore, most of the models in use are based on hyptheses that may be reasonable but which have no empirical foundation.

In the RFP for this planning assistance contract, NIE notes that one alternative for the definition of a model is that it

> . . . can suggest instructional or classroom organization or management features (e.g., pupil/teacher ratios, teacher qualifications, the most effective method of teaching English in a bilingual/bicultural program, or instructional materials and programs).

In this definition, the model is related directly with the pattern of instructional features as they actually occur. This model could either be an administrative guide for teaching behaviors, or it could simply reflect district patterns of observed features. The point is that the model is tied to specific features and not to vague objectives. Such models are potentially the most valuable for improvement of bilingual instructional practices, because they are so specific, and can be implemented fairly simply. These models also lend themselves well to econometric models of costs, since resource-absorbing features are included in the model description.

The language of the Bilingual Education Act indicates that the Congressional definition of a model follows these lines. The following sections from the legislation indicate this general orientation.

Section 703 (b): The commissioner shall distribute suggested models with respect to pupil-teacher ratios, teacher qualifications, and other factors affecting the quality of instruction in bilingual education programs.

Section 731 (d): The Commissioner shall develop models for programs in bilingual education which may include suggested teacher-pupil ratios, teacher qualifications and other factors affecting the quality of instruction offered and shall represent a variety of types of such programs...

Section 742 (b) (1) (2) (6) and (8): Research activities shall include studies to determine and evaluate effective models for bilingual-bicultural programs; studies to determine language acquisition characteristics and the most effective method of teaching English within the context of a bilingual-bicultural program; studies to determine the most effective methods of teaching reading to children and adults who have language proficiencies other than English; studies to determine the critical cultural characteristics of selected groups of individuals for purposes of teaching culture in the program.

The definition of "model" to be used in the instructional features study must at once be responsive to the needs expressed in the Congressional mandate, and be consistent with the phenomenological reality of bilingual education. The legislation seems to indicate that Congress would like to have models of proven effectiveness available for local implementation. A model expressed in terms of its features answers these requirements.

The most definitive test for effectiveness of a model involves setting up experimental classrooms in which features are varied in a systematic experimental design. Such a planned variation study is infeasible within the time and budget of the instructional features study. In fact, even if they could be conducted, such studies are premature in bilingual education research. Not enough is yet known about the specific models that appear promising. The instructional features study is a preliminary step in obtaining the knowledge base required to formulate empirically based models that appear to be effective.

The working definition of a model for the instructional features study should lend itself well to identification of classes of programs that appear to be effective. Moreover, the model should be one that can readily be implemented experimentally. This leads to the definition of a phenomenological model as one formulated on the basis of the data itself and which may or may not represent an external administrative model. Phenomenological and administrative models are the bases for the two definitions formulated below.

5.2 Definitions of "Model"

The characteristics of administrative and phenomenological models have been discussed above, and either definition is suitable for the instructional features study. However, the choice is an important one, since it governs the basic orientation of the study. The two options are as follows:

> First Definition (Phenomenological) An instructional model is a pattern or cluster of significant instructional features as they occur naturally. Models are distinct if they represent different approaches to bilingual education as practiced in the classroom.

> Second Definition (Administrative, "Whole Model," Approach) A bilingual education instructional model is an overall pattern or plan, more or less well defined, that can be used to shape curriculum, select instructional materials, guide teachers' actions, or in general, to control the instructional features of bilingual education.

5.3 Implications for Design

The phenomenological definition of a bilingual education "model" fits in best with a research approach that stresses microethnography and an exploratory approach to development of knowledge. Models are identified directly from the data by statistical and qualitative examination of the patterns of features that occur. The resulting models can be seen as a means of organizing phenomenological data about instructional features into understandable, parsimonious categories. The models may or may not represent distinct philosophical approaches to bilingual education, but, by their construction, they will definitely represent distinct operational approaches.

The phenomenological model may have been guided by an administrative model specifying the features (as in a planned variation study) but it need not have been. Thus its use in the instructional features study requires no conjecture about the intention of the program implementers.

The second major strength of the phenomenological approach is its usefulness for improvement of instructional practices. If distinct phenomenological models appear to have distinct consequences for students, it is reasonable to suppose that instruction can be improved by modeling it after the apparently superior phenomenological model. Since the phenomenological model is described in terms of its features, a corresponding administrative model can be defined by specifying each feature to be implemented, rather like a recipe. Although the retrospective nature of the instructional features study means that it cannot <u>prove</u> the causal connections among variables, it <u>can</u> produce information that can be reasonably treated as causal by reasonable decision makers.

To use the second (administrative) definition in the studies one would collect curriculum materials, read concept papers and model definitions, and interview persons connected with the projects. Management features and the forms of administrative control, recruitment, training, etc., would be

examined. From these data a characterization of the features of the model, as intended by its implementors, could be determined. In practice this process is complex and requires considerable judgment.

Since one objective of the study is to determine effective models for bilingual instruction it will be necessary to classify projects into different administrative model types and to compare the consequences for students across different types. This would involve the study in a new set of problems involving the degree of implementation of different models. Thus, if the administrative (whole) model approach is used to examine the instruction process, a study of the relation between the process and the model, i.e., an implementation study, is needed. This would add greatly to the overall complexity and expense of the instructional features study.

The phenomenological approach to model definition appears distinctly superior. There are fewer technical problems and the results will be more directly responsive to the Congressional mandate. Furthermore the approach requires fewer assumptions about what ought to be, theoretically, and would help to ground the study more firmly on the realities of bilingual education instructional practices.

Bibliography

Andersson, T. and Boyer, M., Bilingual Schooling in the United States, Vol. I, SWDL: Austin, Texas, 1970, p. 49.

Berg, I., Education and Jobs, Praeger: 1970, pp. 85-104, 143-76.

Boudon, R., Education, Opportunity and Social Inequality, New York: Wiley (1973).

Coleman, J.S., The Adolescent Society, Free Press of Glencoe: 1961.

Cosin, B.R., Education: Structure and Society, London: Penguin (1972).

Cronbach, L.J. et al., The Dependability of Behavioral Measurements: Theory of Generalizability for Scores and Profiles, John Wiley and Sons, Inc., USA, 1972.

Cummins, J., "Linguistic Interdependence and Educational Development of Bilingual Children." Review of Educational Research, 49, 2, pp. 222-251, 1979.

Danoff, M. et al., Evaluation of the Impact of ESEA Title VII Spanish/ English Bilingual Education Program, Volume I: Study Design and Interim Findings, AIR Report 48300-2-77-FRIII (Palo Alto, Calif.: AIR, February 1977), ERIC report ED 138-090.

Danoff, M. et al., Evaluation of the Impact of ESEA Title VII Spanish/ English Bilingual Education Program, Volume II: Project Descriptions, AIR Report 48300-2-77 FRIV (Palo Alto, Calif.: AIR, February 1977), ERIC Report ED 138-091

Danoff, M.N. et al., Evaluation of the Impact of ESEA Title VII Spanish/ English Bilingual Education Program, Overview of Study and Findings, AIR Report 48300-3-78-FRVI (Palo Alto, Calif.: AIR, March 1978), ERIC Report ED 154-634.

Danoff, M.N., G.J. Coles, D. McLaughlin, and D. Reynolds. Evaluation of the Impact of ESEA Title VII Spanish/ English Bilingual Education Program, Volume III: Year Two Impact Data. Educational Process, and In-Depth Analyses, AIR Report 68300-1-78-FRV (Palo Alto, Calif.: AIR, January 1978), ERIC Report ED 154-634.

Durkheim, Emile, The Elementary Forms of Religious Life, trans., J. M. Swain, 1915, p. 19.

Fisher, Berliner, et al., BTES Technical Report Series, Report VII-I. San Francisco: Far West Lab (1978).

Fishman, J., Language Loyalty in the United States, The Hague: Mouton (1966).

Flanders, N.A., "Interaction analysis in the classroom: A manual for observers." In A. Simon and E.G. Boyer (Eds.), Mirrors for Behavior, Philadelphia, PA: Research for Better Schools, 1967.

Goody, J., and Watt, I., Comparative Studies in Society and History, Vol. 5, 1962-3.

Harkins, A.M., "Controls, Paradigms, and Designs: Critical Elements in the Understanding of Cultural Dynamics," in Educational Patterns and Cultural Configurations, J. Roberts and S. Akinsanya, (eds) David McKay Co.: pp. 212-221 (1976).

Hollingshead, A.B., Elmstown Youth, Wiley, 1949, as quoted in B.R. Cosin (ed) Education: Structure and Society.

Jencks, C., et al., Who Gets Ahead? The Determinants of Economic Success in America, New York: Basic Books (1979).

Ladinsky, J., "Careers of lawyers, law practice and legal institutions." Amer. Sociol. Rev., Vol 28, Feb., pp. 47-54, 1963.

Leinhardt, G., "Applying a Classroom Process Model to Instructional Evaluation," Curriculum Inquiry, 8, 2, pp. 168-176 (1978).

Medley, D.M., Teacher competence and teacher effectiveness: A review of process-product research. Washington, DC: American Association of Colleges for Teacher Education, 1977.

Medley, D.M., and Mitzel, H.E., Measuring classroom behavior by systematic observation. In N.L. Gage (Ed.) Handbook of Research and Teaching. Chicago, IL: Rand-McNally, 1963, pp. 247-328.

Mehan, H., "Participation Structures, " paper, San Francisco: Far West Labs (1979).

National Advisory Council on Bilingual Education, Fourth Annual Report, 1978-1979, September 30, 1979, pp. 31-35.

New York State Education Dept., Bilingual Education: A Statement of Policy and Proposed Action by the Regents of the University of the State of New York, Albany, N.Y.: State Education Department, August 1972.

Pena, S., "What is Bilingual Education?" In General Information About Bilingual Education. Austin: Bilingual Resource Center (n.d.).

Persell, C.H., Education and Inequality, New York: Free Press (1977).

Romero, O., and Castro, R., Bilingual Education vs. Bilingualism Policy Issues. Portland NREL, June 1977.

Tamora, E., "Bilingual-Bicultural Education Today: State of the Art Report," ibid.

Zeydel, E.H., The Teaching of German in the U.S., MLA: 1961, p. 289, as quoted in S. Nieves-Squires, "Why Bilingual Education?," public address in Amherst Public Library, 1975.

GPO 867-093